

## ABSTRACT OF THE DISCLOSURE

A control unit of a vehicle generator is provided which is capable of instantaneously stopping power generation in a safe manner with an inexpensive system configuration without the need of interrupting a large current when a key switch is turned off. The control unit includes a vehicle generator (2), a battery (5) adapted to be charged by an output of the vehicle generator, and a control circuit (2) having an on-off control switching transistor (1j) for controlling the turning on and off of a field current of the vehicle generator. The control circuit is operable to interrupt the on-off control switching transistor (1j) when a detected voltage of the battery (5) is higher than a reference voltage, and make the on-off control switching transistor (1j) conductive thereby to control the voltage of power generation at a predetermined voltage when the detected voltage of the battery (5) is below the reference voltage. A power generation stop circuit (6) is provided which has an off detection circuit (6a) for detecting turning off of a key switch (4) of a vehicle. The power generation stop circuit (6) is operable to stop the power generation of the vehicle generator (2) when the off detection circuit (6a) detects the turning off of the vehicle key switch (4). A power generation stop terminal (K) is connected with a control terminal of the on-off control switching transistor (1j). The power generation stop circuit (6) controls the power generation stop terminal (K) to stop the power generation of the vehicle generator (2) instantaneously when the off detection circuit (6a) detects the turning off of the vehicle key switch (4).